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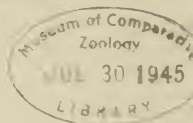
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## Some Notes on the Life and Explorations of Hugh Cuming

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By WILLIAM J. CLENCH



The following notes on the life and explorations of Hugh Cuming may be of interest, particularly at this time, as so much material is being collected in the Philippine Islands, a region Cuming explored over a period of three years better than a century ago.

Botanists have been far more lenient in their estimate of Cuming than have most zoologists, at least so far as the published record is concerned. That he was a very remarkable man is certainly not questioned, and as a field-man he probably has never been equaled for the number of species of mollusks collected by any one person. However, his habit of depending upon his memory for the name and locality of his specimens, left to the taxonomists of the past, present and future the weary task of ferreting out his mistakes.

I have not seen the original Cuming collection which is now in the British Museum. I have, however, many hundreds of his specimens under my charge that have come to this museum in the collections of his contemporaries, through C. B. Adams, J. G. Anthony, Thomas Bland, A. A. Gould and others. There are no original labels. Cuming numbered his lots and then sent separately a corresponding list of numbers with their names and localities. Such a procedure added errors to any

original mistakes made at the time the material was boxed and shipped.

Cuming had the remarkable ability of getting new specimens for his collection. His enthusiasm must have instilled into others a willingness to collect shells wherever they went and as a consequence he fell heir to much material collected by expeditions and travelers in remote and, at that time, wholly unexplored regions. This naturally resulted in a remarkable number of new forms which Cuming proceeded to have described by a host of associates. The unfortunate part was that much of the original data was lost or completely left out of the record.

Hugh Cuming brought together the largest private shell collection of his day. Since that time only two or three private collections have equaled or surpassed his in the number of lots. According to Melvill, he had 19,000 species when his collection was purchased by the British Museum in 1866. The great value of this collection was in the large number of original specimens that it contained, material which had formed the basis for the descriptions of many new species.

Hugh Cuming was born in West Alvington, Devonshire, England and died in London. At the age of thirteen or fourteen he was apprenticed to a sail maker which brought him in contact with many men of the sea. Apparently he was already keenly interested in natural history and the sailors' yarns of their experiences in foreign lands must have fired his ambitions for travel. In 1819 a business opportunity led him to Valparaiso, Chile. Here he met Mr. Nugent, the British Consul; also Lieutenant Fremby, a conchologist of note who had devoted his time to studying the many large chitons which occur along the Chilean coast. Their interest and influence made possible the aid granted by the Chilean government a few years later when he collected along the South American coast.

Whatever Cuming's business was it must have been exceedingly profitable, as he was able to retire after a seven year period (1826). He then had built and fully equipped a yacht,



*Hummer*

1791-1865

Plate 7. Copied from an original photograph  
sent to J. G. Anthony in 1865.

Photograph by F. P. Orchard

the *Discoverer*, which was especially designed for collecting and dredging biological material.<sup>1</sup> His first venture was to the islands of eastern Polynesia. This trip was made by way of the Island of Juan Fernandez off the coast of Chile, Rapa Nui or Easter Island and thence to the Pitcairn Islands. In addition, several islands in the Society, Tuamotu and Tubuai groups were visited. His somewhat lengthened stay on Anaa Island in the Tuamotu group yielded a fine harvest of marine shells which were later described by Reeve and Sowerby. Much botanical material was also collected.

The success of this trip led to another and far more extensive voyage. According to Melvill, two years were spent exploring the coast of South America between Lima, Peru and Chiloé Island, Chile. The Galápagos Islands were also included. It would appear certain that far more territory was explored than was delimited by Melvill (p. 61). We have several lots of Cumingian shells from the west coast of Central America and South America, north of Lima, which had been collected during this two year period and many published records by Sowerby, Reeve and others, exist for coastal regions north of Lima. He certainly reached as far north as the Gulf of Nicoya in Costa Rica. In a conversation that I had with Dr. Johnston, he stated that the plants collected by Cuming would indicate that he may have reached as far north as Acapulco, on the west coast of Mexico. The probable dates of Cuming's visit and the islands collected in the Galápagos have been reviewed by Howell.

In 1831, he returned to England to find himself quite famous. His collecting successes in Polynesia and the Eastern Pacific made possible a trip to the Philippines, a region almost wholly unknown at that time. Cuming spent three years in these islands from 1836 to 1839, during which period he visited nearly all of the larger islands and many of the smaller ones. A very

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<sup>1</sup> So far as I can determine, the *Discoverer* was the first boat designed specifically for the purpose of collecting natural history specimens. As stated elsewhere, the lack of data with the material collected has left its name almost wholly unknown in the annals of such vessels.

fine account of his Philippine expedition has been written by E. D. Merrill.

It has been stated that Cuming was a pioneer in giving exact locality data for his material. This may be true for some of his shells but it is certainly not true for the majority of the species credited to his collecting. Not only are data lacking but in many cases the data associated with the species have since proved to be wrong.

Dr. J. E. Gray, Keeper of Zoology at the time the Cuming collection was purchased by the British Museum, has published the following, regarding the data and other facts about Cuming's collection. I quote only the most pertinent remarks in Gray's paper though there is much additional information of general interest.

"I certainly should have considered the following observation unnecessary if most exaggerated statements had not been published respecting the collection, which are likely to mislead the public—such, for example, as that each specimen had not only its name and its special locality attached to it, but also the depth in the ocean at which it was found, and that the specimens are in all instances the actual types of the species from which the descriptions have been taken. As this is not the case, it is necessary that some account of the collection as it was received by the British Museum should be given, in order that it may be properly understood by the scientific conchologists who may hereafter consult it. I have not the least intention by the following remarks to depreciate the value of Mr. Cuming's labors as a collector, or of his collection; for every conchologist, both scientific and amateur, is very greatly indebted to him for having collected one of the largest and most perfect collections of shells ever brought together; for he not only collected extensively himself, but he excited others to collect, and he left no stone unturned to obtain from other collections in all countries such specimens as he wanted, or from which, as types, species had been described; and he also, in the most free and liberal manner, opened the collection to the use of such conchologists and iconographers as would fall into his views as to the describing and naming of species.

“When I first saw the collection, fifteen or sixteen years ago, as may be seen by my report to the Trustees of the British Museum, which is published in one of the Parliamentary Papers relative to the Museum, the collection was without any names or habitats to the species. The names have been added since Mr. Cuming’s recovery, and gummed to the mouth of one of the specimens of each preserved species. These names were not affixed by the original describers and figurers of the species, but by two well-known conchologists; and as they must be considered to rest on identification by the latter and not by the original describers, this rather detracts from their authenticity as absolute types of the species described. It is to be regretted that when these names were attached, the special habitats of the specimens were not also marked on them.

“I am informed that as soon as any specimens were described Mr. Cuming was in the habit of destroying the habitats sent with them, as he said they could be discovered by looking at the work in which they were described. This is certainly a very inconvenient and roundabout way of arriving at the information required: if the species was procured from two or more localities, one is not able to discover which specimen belonged to each special locality.

“In many of the specimens, especially those that have not yet been determined or named, the habitat, written on a small paper label, is stuffed into the mouth of the shell.”

Johnston holds that certain of the Cumingian localities on the west coast of South America were shipping points rather than the actual collecting localities. This was in reference to his botanical material, though the same is probably true for his shipments of mollusks. Mr. E. L. Layard, who had been a close associate of Cuming, makes the following statement:

“I have often heard collectors complain of the inaccuracy of some of the localities given by Cuming, and I think I can account for this. . . . I have seen him making up a series of specimens for a correspondent, and I have also said I do not



think he could write. I never saw a notebook in his hand, nor were his shells in separate labelled boxes. He trusted entirely to his wonderful memory, not only for his localities, but for the names of the shells and their authors."

This statement of Layard that Cuming could not write, may, of course, be the answer to the unlabeled condition of the Cumingtonian collection, at least as far as it concerned the material he had personally collected. In fairness to Cuming, we may judge that certain of the data might have been eliminated from the record by the describers of his shells. It is to be borne in mind that at that time, data, other than a name, were considered of interest rather than of value. It is unfortunate that many species described from his collection, but not collected by him, had inadequate data as to the collector. A clue to their origin would be a material aid in an understanding of many of his species.

Cuming did not collect in the Western Atlantic. However, the vast collections that he had obtained in both the Eastern and Western Pacific offered tempting material for both exchange and purchase. As stated above, the origin of many of his Western Atlantic shells is seldom indicated in the descriptions that were published by many authors who had access to his collection. I know that C. B. Adams, T. Bland and T. Swift were among the many who contributed specimens from the Western Atlantic in exchange for the many new species that he had collected in the Philippines.

Merrill believes that Cuming was not illiterate as has been stated, but was capable of writing a fine letter. This belief is based upon the several letters written to Sir William J. Hooker by Cuming during his Philippine expedition. However, Dr. Merrill did not see the original letters, but only transcribed copies. We possess fourteen original letters by Cuming that were written between the years 1852 and 1861 to J. G. Anthony, W. G. Binney and T. Bland. Three or four different handwritings are apparent and Cuming's signature on each is different from the writing in the letters, leaving one with the impression that they may have been written by someone acting in

the capacity of a secretary, but that Cuming added his own signature.

Hedley, in a report upon the mollusk fauna of Queensland, has given an excellent history of the various collectors that had been associated with the development of the natural history of that State. In his remarks under John MacGillivray, naturalist of the *Rattlesnake* Expedition, he gives the following that is pertinent to Cuming:

“The shells of MacGillivray seem to have passed into the hands of Cuming. Hugh Cuming was an illiterate sailor, whose history shows him as a man of strong character, a master organiser, and one born to success. He aimed to have the finest collection of shells in the world, and he reached it. Unfortunately, his plans did not regard the advancement of science, and the strong man wastes no energy on aught but the attainment of his object.

“For purposes of sale or exchange, an unnamed shell was of less value to him than one named, so names were needed for his wares. More time for determination and description was required by careful writers. But worse authors quickly supplied names good or bad, and doubtless better submitted to Cuming’s dictation as to what constituted a different species.

“So the leading conchologists of his generation in England, Gray, Woodward, Forbes, Hanley, and Carpenter, had little or no dealings with Cuming. Gray, indeed, seems to have quarrelled outright. The naming of Cuming’s huge collection fell to weaker men—Reeve, the Sowerby’s, and the Adams [H. and A. Adams]. It has happened that these renamed the same species twice or thrice. The least amount of work necessary to carry the name satisfied them.”

I have read somewhere that Cuming paid a shilling a species to have his shells described. In the days of very short and formal Latin descriptions, such a procedure was a rather profitable venture, particularly when no illustrations accompanied the text. Many of these species were later figured in the



monographs of Reeve, Sowerby, Pfeiffer, and others, but it still leaves a long and sometimes difficult search to locate a figure for some of these species and, of course, uncertainty generally exists whether the figured specimen and the description were based upon the same material.

We have a case in point regarding MacGillivray specimens. In our collection, there are three lots of *Cyclostoma forbsiana* Pfeiffer, described from the Cumingian collection and originally collected by MacGillivray. One lot from Dohrn, who had purchased the Pfeiffer collection, gives the locality of New Hebrides, the second lot directly from Cuming is given as from New Caledonia and the third lot originally received from Cuming by Gould is without locality data. As far as we now know, all of these lots came from New Caledonia; the locality of New Hebrides published by Pfeiffer is certainly open to question.

Errors of this sort are exceedingly exasperating to workers on faunistic studies. Such inaccuracies inject into the geographical problem disharmonic elements which are very difficult to explain. This is particularly true of regions that are still imperfectly known. It is only in areas which are well surveyed that such errors can be ruled out. The following short and cryptic note by Connolly expresses an opinion that I have heard verbally many times:

“*G. obovata* was described as from Liberia, obviously one of the many miasmas arising from the pestilential conchological swamp of the Cuming collection; the species seems to be confined to Natal.”

Dr. Prashad of the Indian Museum, Calcutta, told me at the time of his last visit that Cuming substituted new material for old when he obtained better specimens. This, of course, was regardless of the fact that the old material may have been the types upon which the species was established.

It would appear that Iredale unwittingly committed an error that may have been based upon such a substitution. Reeve figured a specimen from the Cumingian collection as *Cassis*

*recurvirostrum* Wood, with the locality of Raine's Island, Torres Strait [Australia]. This figured specimen is unquestionably *Phalium cicatricosum* Meuschen from the Western Atlantic. Iredale, noting its differences from any known Australian species, renamed it *Xenogalea lacrativa*.

Many localities given by the describers of Cuming's shells were brief, mentioning only the town or city. In most cases, of course, there are not many chances for error. In a few cases, certainly, unsuspected errors may occur by using a locality name and then adding the wrong country. A case of this sort was indicated by von Martens<sup>1</sup> in which Carácas was given as the locality. The Cumingian locality was Carácas, Ecuador (S. Lat. 0°30') and not Carácas, Venezuela, by far the better known place. In addition, on modern maps, the Ecuador locality appears as Bahía de Caráques.

In the Zoological Record for 1869, p. 530, von Martens mentions that Cuming collected on two of the three Pacific islands known as Lord Hood Island. One of them is in the Galápagos group and the other is in the Tuamotu Archipelago. Care must be taken to differentiate between these two localities as two faunistic areas are concerned.

That Cuming was able to get the best of exchange material is attested to by the following paragraph that appeared in a letter now in our files by J. G. Anthony to Thomas Bland. It was written in Cincinnati, Ohio, October 23, 1856.

"Started another man off this morning for two days trip to Indiana for Unios to a special locality where they grow large. I shall move heaven and earth to get good specimens for Cuming. All my wits are at work for him and if there is any 'good thing in Nazareth,' I am bound to ferret it out for him."

One can readily glean from the following passage in a letter to T. Bland (London, April 30, 1852) that Cuming wanted to "corner the market" as far as it concerned some of the rarities among the mollusks. "You observe that you are likely to get

<sup>1</sup> Nachrichtenblatt deut. Malakozoologischen Gesell., 8, 1876, p. 68-69.

specimens of the *acosta* [?] of D'Orbigny, I will take 20 or 30 at £ 1. each provided you do not send any away or allow them to be in any other hands otherwise they are not worth to me so much." From the tone of his letters to Bland and especially to J. G. Anthony, this desire to hold and control prize specimens was not for any pecuniary gain but to use this choice material in exchange for equally choice species that would add to his collection. He expressed his delight for the large and fine Unios that had been sent by Anthony from the region of Cincinnati.

Cuming must have corresponded with about all of the shell collectors of his day as most collections made prior to his death in 1865 are sure to have a few of his specimens. The British Museum probably disposed of certain duplicates after it came in possession of his collection. Many private collections made after 1865 contained material purchased from Sowerby with the note "Cuming Collection" on the label.

In the later years of his life, Cuming financed several field collectors, either wholly or in part, and as a consequence, added much to his collection from this source. In a letter to Thomas Bland, he complained bitterly that, though he had contributed £ 25 towards Blauner's trip, Shuttleworth, for whom Blauner had made the trip [Puerto Rico?] had only sent him two or three of the new species that had been found. He also aided Auguste Sallé in 1849-1851, in making a trip to Santo Domingo [Hispaniola] for the purpose of collecting mollusks and orchids. Sallé's one-man expedition still stands as the most successful trip, from a malacological point of view, that has ever been made to this island.

Cuming will always be remembered as a great collector. That he failed to give all the necessary data with his material is, of course, to be regretted. He was a product of his time, a time when natural history objects had value, mainly in themselves, and he, like many of his contemporaries, failed to realize the intricate problem of distribution and its relationship to all other branches of Natural Science. It will be years before his mistakes are corrected and his omissions admitted to the record by others.

The following papers have much additional information about the life and record of this remarkable man.

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- Gray, J. E. 1868: Notes on the Specimens of Calyptraeidae in Mr. Cuming's Collection. *Proc. Zoological Society of London for 1867*, pp. 726-748. [The Introduction of this paper is republished in the article by Gray (below) in the *American Journal of Conchology*.]
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- Howell, J. T. 1941: Hugh Cuming's Visit to the Galapagos Islands, *Lloydia*, **4**, p. 291.
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- Johnston, I. M. 1936: A Study of the Nolanaceae, *Proc. American Acad. Arts and Sciences*, **71**, p. 15.
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- Merrill, E. D. 1926: Hugh Cuming's Letters to Sir William J. Hooker, *Philippine Journal of Science*, **30**, pp. 153-184, plate 1. [This paper has an important bibliography, containing a long list of references to articles based wholly or in part on Cuming's material.]
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